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| APPLICATION NO.       | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------|-------------|----------------------|---------------------|------------------|
| 10/511,139            | 10/14/2004  | Jun Fujita           | 121510              | 1973             |
| 25944                 | 7590        | 09/29/2006           | EXAMINER            |                  |
| OLIFF & BERRIDGE, PLC |             |                      | MAYES, MELVIN C     |                  |
| P.O. BOX 19928        |             |                      |                     |                  |
| ALEXANDRIA, VA 22320  |             |                      | ART UNIT            | PAPER NUMBER     |
|                       |             |                      | 1734                |                  |

DATE MAILED: 09/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                 |                     |  |
|------------------------------|---------------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b>          | <b>Applicant(s)</b> |  |
|                              | 10/511,139                      | FUJITA, JUN         |  |
|                              | Examiner<br>Melvin Curtis Mayes | Art Unit<br>1734    |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 10 July 2006.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 8-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 8-19 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | Paper No(s)/Mail Date. _____.                                     |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|   | 6) <input type="checkbox"/> Other: _____.                         |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

(1)

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(2)

Claims 8-19 are rejected under 35 U.S.C. 103(a) as obvious over Bonzo 4,557,773 in view of JAIC 1984, Gipson 4,646,914 and University of Technology Sydney Adhesive Tape Database.

Bonzo discloses a method of fabricating a honeycomb structure comprising: providing an extruded ceramic honeycomb structure; securing a solid covering film to the end face of the honeycomb; forming openings in the film by sources such as laser or intense light; plugging cells in the honeycomb with ceramic cement; and firing the structure and cement. The solid covering film can be masking tape such as one mil thick (0.025 mm, 25  $\mu\text{m}$ ) polyester film such as Scotch Brand Magic Transparent Tape (col. 7, line 3 – col. 11, line 22).

JAIC 1984 teaches that Scotch Brand Magic Mending Tape has an acrylic polymer adhesive (pg. 102).

Gipson teaches that one type of Scotch Brand tape is polyester film tape with an acrylic adhesive (col. 2, lines 51-53).

The University of Technology Sydney Adhesive Tape Database teaches that Scotch Brand tapes of backing and acrylic adhesive have a thickness of adhesive of approximately 0.02 mm (20  $\mu\text{m}$ ).

By providing the masking tape as Scotch Brand tape with polyester film (backing), the tape is provided with an acrylic adhesive because Scotch Brand tapes use acrylic polymer for the adhesive, as evidenced by JAIC 1984 and Gipson.

By providing the masking tape as Scotch Brand tape with acrylic adhesive, the tape is obviously provided with an adhesive thickness of approximately 20  $\mu\text{m}$ , as the University of Technology Sydney Adhesive Tape Database teaches that Scotch Brand tapes are provided with acrylic adhesive thickness of approximately 20  $\mu\text{m}$ . By providing a polyester backing of 25  $\mu\text{m}$  thickness and acrylic adhesive of approximately 20  $\mu\text{m}$  thickness for applying to the honeycomb, a tape (film) of total thickness of approximately 45  $\mu\text{m}$  (in the range of 10-70  $\mu\text{m}$  as claimed in Claim 10) comprising a polyester substrate layer of thickness of 25  $\mu\text{m}$  (in the range of 5-40  $\mu\text{m}$  as claimed in Claim 12) and acrylic adhesive layer of thickness of 20  $\mu\text{m}$  (in the range of 5-40  $\mu\text{m}$  as claimed in Claim 13) is provided, thus providing an adhesive tape having an adhesive force in the range of 3-15 N/25 mm, 10-15 N/25 mm or 5-11 N/25 mm (as measured in accordance with JIS Z0237), as claimed. Because the tape of polyester backing and acrylic adhesive has total thickness and backing and adhesive thicknesses within the ranges set forth as providing adhesive film having adhesive force in the range of 3-15 N/25 mm, the tape of polyester backing and acrylic adhesive as described by Bonzo in view of the teachings of JAIC, Gipson and the University of Technology Sydney Adhesive Tape Database obviously has an adhesive force within the claimed ranges of 3-15 N/25 mm.

*Response to Arguments*

(4)

Applicant's arguments filed July 10, 2006 have been fully considered but they are not persuasive.

Applicant argues that Bonzo discloses a film thickness of 0.025 mm (25 microns) but does not disclose or suggest whether the thickness is the thickness of the adhesive or total thickness including substrate layer, while present Table 1 lists examples with total thickness significantly greater than 25 microns. Applicant argues that acrylic polymer is too general a term to identify the specific material of the adhesive layer of Bonzo and argues that an acrylic adhesive material could produce different adhesive forces if the adhesive tape is of different thickness.

(5)

As set forth in the rejection, Scotch tapes conventionally have acrylic adhesive of thickness of approximately 20  $\mu\text{m}$ . Whether the 25 micron polyester film thickness disclosed by Bonzo refers only to the substrate thickness or refers to the total thickness of adhesive and substrate, the thickness of adhesive and substrate and total thickness of the tape is in the ranges set forth by Applicant and with respect to Table I, is close to either Example 1 or Example 2 in total thickness and thus in adhesive force in accordance with JIS Z0237. While the prior art may not suggest a range of adhesive force which is desirable to prevent honeycomb breakage and film slippage, the prior art nevertheless discloses or suggests using an adhesive tape which has properties of thicknesses, and thus adhesive force, within the ranges as claimed. The Examiner does not have the means to measure the adhesive force of the tape in accordance with JIS Z0237,

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however, the materials and thicknesses are similar to that of Applicant's Table 1. Thus it is reasonable to conclude that the tape has an adhesive force with the ranges as claimed.

With respect to the use of an acrylic polymer, Applicant also uses the general term "acrylic adhesives" and as stated, the adhesive force property is based on the thickness of the adhesive, not the particular adhesive. Since the prior art suggest that the same type of adhesive is used, acrylic, then the same or similar adhesive force properties with respect to thickness are expected.

*Conclusion*

(6)

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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(7)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin Curtis Mayes whose telephone number is 571-272-1234. The examiner can normally be reached on Mon-Fri 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on 571-272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Melvin Curtis Mayes  
Primary Examiner  
Art Unit 1734

MCM  
September 26, 2006